

thus expanded over it. An opening was made in the placenta, and the dead child was expelled through it. The mother recovered well. The second occurred in November, 1844; the mother was about six months and a half advanced in pregnancy; the child was delivered by turning, and was stillborn. The mother rallied at the time, but died from puerperal peritonitis, six days after delivery. The third took place in March, 1846, and was also at the period of six months and a half. Delivery was effected by turning, and the child was stillborn. The mother recovered, but suffered from neuralgic pain in one leg for several months. In the fourth case, April, 1847, a stillborn child was delivered by turning, at six months and a half; the mother recovered.

Mr. REID related a case which had been under his care in October, 1848; the patient was the mother of eleven children. During the two months preceding the full period of pregnancy, there had been, at intervals, several considerable losses of blood. When first seen, the patient was prostrated by a profuse hemorrhage which had taken place suddenly. The vagina was immediately plugged, and stimulants were freely administered; after a time the hand was introduced, and the placenta, which was directly over the os uteri, was detached by the fingers, the os not being sufficiently dilated to admit the hand. After this, the prostration of strength became so great, although there was no further hemorrhage, that for three hours it was necessary to give the whole attention to the restoration of the patient's vital powers. During the whole of this period no contraction of the uterus was perceived; though at last, when the hand was introduced, the placenta was found projecting in the form of a cone through the os uteri; by gentle traction, which excited slight uterine pains, it was removed. After waiting some time, and apparently no effort being made by the uterus to expel the child, the head, which presented, was perforated, and the child was delivered. Uterine pains returned with the traction that was used, and the uterus contracted firmly after the child was withdrawn; the patient subsequently had a slow but good recovery. As far as one case could, this confirmed the rule which Dr. Murphy had established in considering the alternative of separating the placenta or turning, in cases of placenta prævia; that, in instances of extreme exhaustion, the plan of separating the placenta was not only advisable, but would be found a valuable mode of treatment. In this case there was the greatest probability that any forcible introduction of the hand, in order to turn, would have proved fatal.—*Assoc. Med. Journ.*, Feb. 9, 1855.

66. *State of the Fœtal Pulse as an Indication for Artificial Delivery.*—Professor SIMPSON made some remarks at a recent meeting of the Edinburgh Obstetrical Society on the indications afforded by the stethoscope for expediting delivery, and specially directed the attention of the Society to the fact that, while danger was usually indicated to the mother during labour by the increased rapidity of her pulse, the death of the child was most frequently threatened when the fœtal pulse became slower and slower. It was known that in cases where, during labour, pressure was exercised upon the cord, the pulsations of the fœtal heart became feebler, and were at length suspended by the continuous pressure. This was most probably the way in which the fœtus perished during severe and prolonged labours; the aeration of the blood by the placenta being imperfect, or entirely suspended. There were, however, cases in which danger was indicated to the child by the fœtal pulse becoming much more rapid than ordinary, reaching 150 or 160 beats in the minute, and at the same time very irregular. Dr. S. believed the danger in these cases did not result from pressure on the umbilical cord, as in the cases where the pulsations became slower and slower, but from pressure, or some source of irritation acting on the brain.—*Monthly Journ. Med. Sci.*, April, 1855.

67. *Epidemic Puerperal Fever which recently prevailed in the Dublin Lying-in Hospital.*—Dr. MCCLINTOCK read before the Dublin Obstetrical Society, March 2, 1855, the following interesting account of this epidemic:—

“The epidemic, whose history I am about to bring forward, unequivocally declared itself in the first week of last December [1854], and subsided in the

middle of February [1855]. Unlike the one of 1845, its outbreak cannot be said to have been either sudden or unexpected, inasmuch as twelve or fourteen cases of puerperal peritonitis and phlebitis, together with a few isolated examples of typhus and scarlatina, had occurred in the house during the preceding nine months.

"From the beginning of December to the 14th February, 182 women were confined in the hospital. This, I may just remark, is not half the average number of deliveries in the same period, and was owing to a stop having been put, in the latter part of December, and during all January, to the admission of patients, except such as were so near delivery that it would have been attended with imminent risk to send them away.

"Now, of these 182 women, 38—that is, 1 in every 5—were unequivocally affected with the symptoms of the disease; and out of these 38 so affected, 17 recovered, and 21 died, making the proportion of fatalities nearly 1 in 8 of all admitted; a frightful rate of mortality, and more than tenfold the average of this hospital.

"In three of the above cases, the puerperal disease was complicated with scarlatina. Two of these died, and the third made an excellent recovery, though the metritic attack was a marked one, and the scarlatina very severe, showing itself so early as the second day after delivery, and presenting in its course a truly formidable array of symptoms. On two occasions, this woman seemed to owe her preservation solely to the liberal exhibition of wine and brandy, and this too at the very time when we had every reason to fear the existence of uterine inflammation.

"It would be wearisome and tedious were I to give the individual history of all these cases, and yet I am quite at a loss how to classify or arrange them, not knowing what to take as the basis of any such classification, as they presented considerable variety in their symptoms, course, and morbid appearances. For example, in many cases, including some of the most malignant, there was no initiatory rigour whatsoever. Again, intense abdominal pain was a prominent feature of some cases from the onset to the termination; whilst in others, equally fatal, there was *no* complaint of the belly. Vomiting, likewise, was an early and constant attendant upon the disease in not a few instances, whilst in some it did not appear at all, or only at the close. And so on with the morbid appearances; some cases presenting intense peritonitis, others phlebitis, and a few putrescence of the uterus, and these either separately or conjointly. There were two features, however, common to them all, namely, a very rapid circulation, the pulse ranging from 120 to 140, and a marked adynamic type; so marked, indeed, that in two cases only did I feel justified in making trial of phlebotomy, and these, as you may suppose, were selected cases. Yet, in each of them, the supervention of syncope rendered it necessary to discontinue the bleeding before ten ounces of blood had been abstracted, one losing about seven, and the other nine fluidounces; and what is still more worthy of attention is the fact that in neither of these instances did the blood exhibit, after some hours' standing, any of the characters indicative of inflammation. Both these patients died.

"In nothing did the various cases differ so much as the manner in which the disease made its invasion. In the majority, a rigour announced its first onset, this being speedily followed by pain or uneasiness in the uterus; except in three or four instances, the pain was not by any means intolerable or severe at the commencement, or even for some hours afterwards. Tenderness of the uterus to pressure, however, with perceptible augmentation of its bulb, was almost invariably found to be present from an early period of each case.

"The first approaches of the disease, when not ushered in by rigour, were sometimes remarkably slow and insidious—the only deviations from normal convalescence being a trivial acceleration of the pulse and a slightly furred state of the tongue, with, perhaps, diminished secretion of milk. On two or three occasions the attack began apparently with after-pains, or at least with pains of an intermitting character, commencing almost immediately after delivery, and so equivocal in their nature that it was impossible to say when they ceased to be purely spasmodic and became inflammatory. Mr. Hey, of

Leeds, in his *Treatise on Puerperal Fever*, makes the remark 'that, during the epidemic season, lying-in women were unusually subject to after-pains, and those of a more violent kind than ordinary.' My recent experience is quite in accordance with this observation.

"The patient's own representation of her state we found could not always be relied on, owing to her unconsciousness of the presence or the progress of the malady. Frequently her statements on this head, though made with confidence and complacency, were yet so utterly at variance with the symptoms and actual condition of the patient, that the most inexperienced observer could scarcely have been deceived by them for one moment. Whether this apparent ignorance of her real state arose from an unwillingness to believe she was affected with illness, or formed part of the disorder, I cannot take upon me to say; but certain it is that no less than four or five of these poor creatures have assured me, in language of gratitude and self-satisfaction, that they felt perfectly well, and this too when their general symptoms plainly forbade all hope of recovery.

"This complete unconsciousness of danger, however remote, at a time when the hand of death was almost upon the patient, was a curious and distressing feature of the disease; and is the more remarkable from the fact that these women were apparently in full and perfect possession of their mental faculties. I have once or twice before observed the same in women dying of pure metro-phlebitis.

"Vomiting was not by any means a very prominent or constant symptom, except in the marked peritonitic cases; though in nearly all the fatal cases it came on some hours before death. Several of those who recovered had sickness of stomach, and a few of them even vomited large quantities of the dark-green tenacious fluid which has been aptly compared to green paint.

"Guided by the experience of this epidemic, I feel disposed to regard the state of the tongue as a more reliable prognostic than any other *single* symptom. With only one or two partial exceptions, I never saw a patient recover when the tongue had become dry, or brown, or glazed; I have observed this symptom before any of the others had assumed a mortal or even threatening character; nor was it absent in any of the fatal cases of the disease.

"At the outset of an attack the tongue was usually white, slightly furred, and somewhat less moist than natural. In many cases, this state of the organ has been the very first symptom to excite alarm, and to apprise us of the coming storm.

"As the disease made progress, the next unfavourable change observed in the state of the tongue was a dry, brownish streak down its centre, and more remarkable towards the base. This condition gradually extended until the entire dorsal surface of the organ was involved.

"I think I am justified in asserting that the prevailing character of the tongue in the late epidemic was a close approximation to what is usually called the 'typhoid tongue,' and this is one symptom wherein it differed from the epidemic of 1845, in which the tongue presented most usually a broad, soft, creamy appearance. Mr. Hey, in his *Account of the Puerperal Fever as it visited Leeds*, makes the following remarks, which are pertinent to our present subject, as marking the contrast, in this symptom, between the two epidemics:—

"'The tongue was never incrustated with the dry brown fur of typhus, except the disease was of long continuance, or had been improperly treated. It was generally moist and soft, and though it was not unfrequently covered with a thick white or brownish fur, yet it was often but little altered from its natural appearance to the last, even in bad cases.'

"Diarrhoea was present in most of our cases, but was not so conspicuous or so formidable a complication as in the epidemic of 1845. I cannot but think that its first production was often attributable to the mercury and some of the other remedies which were used to subdue the disease; had it been otherwise, it is probable we should have experienced more difficulty in restraining it.

"Fulness of the belly, with tympanitis to a greater or less extent, was almost universal; but in the individual cases this condition did not become remarkable till an advanced stage of the complaint, except in those which showed

from an early period a preponderance of the symptoms referable to inflammation of the peritoneum.

"The extreme rarity of cerebral disturbance in the course of puerperal fever is attested by nearly all observers, and the general tenor of my own experience agrees therewith. Nevertheless, I saw four cases which were exceptions to this rule. Two women, some hours after the first appearance of the disease, became quite lethargic, inasmuch that it was only with great difficulty they could be roused to any degree of consciousness; and in this state, closely bordering on coma, they remained till their death, not many hours after. Another patient was affected in quite an opposite way. She was very restless and excited, wanting to get out of bed, and with difficulty restrained from doing so. Along with this she had a kind of noisy delirium, bearing a very close resemblance to one form of puerperal mania. These three women exhibited in a marked degree the same morbid appearance, namely, putrescence of the interior of the uterus and sloughing of the vagina. The fourth patient actually became maniacal three or four days after the development of puerperal fever. In the course of a week, however, she regained possession of her reason, but was very near dying of the puerperal fever.

"There seemed to exist throughout the epidemic a strong tendency to putrescence or sloughing of the uterus and vagina, and this, too, quite irrespective of the length or character of the labour. In six cases, we had direct proof of the existence of this gangrenous condition; two of these were patients that recovered, and had sloughing of the vagina.

"This constitutes an important feature in the late epidemic, and places it in strong contrast with the disease as it presented itself to Dr. Joseph Clarke and Dr. Collins; for neither of these authors makes any mention of such having occurred in their experience.

"Dr. Collins, in describing the morbid changes which he met with in the uterus, as a result of puerperal fever, thus expresses himself: 'The uterus, in the great majority, was quite natural in appearance; in some it was soft and flabby; and in a few, unhealthy matter was found in the sinuses.'

"Elsewhere in his report he states that only one case of sloughing of the urethra occurred during his seven years' mastership.

"Dr. Clarke, in his account of the epidemic of 1787-8, distinctly says that no unequivocal marks of putrescency in any part of the system appeared in the disease.

"It has already been stated that in every instance the pulse was found to be very rapid. At the commencement of an attack it was rarely below 112, occasionally much higher; and as the symptoms became more developed, and the disease made progress, the pulse commonly rose to 130, 140, and even 160. The other characters of the pulse were sufficiently remarkable to render them deserving of notice. In no one instance could we have applied to it the epithet 'incompressible;' on the contrary, it was invariably soft and yielding, and gave to the finger a sensation that is best described by calling it 'liquid or undulating.'

"During the epidemic of 1845, and I believe in former epidemics also, trismus and convulsions prevailed to an unusual extent among the children born in the hospital. It is a fact, however, worth recording, that not a single example of either of these complaints presented itself during the entire period of the late visitation.

"It rarely happens that puerperal fever breaks out in the hospital without its contemporary appearance in private practice; and it never happens, I believe, that it prevails to any extent outside of the hospital without appearing among the patients within its walls. On the late occasion, I had reason to know that several deaths had occurred from the disease amongst women confined at their own homes, and lacking neither comfort nor attention, before it visited the hospital. Nor since then were its ravages confined to the poor inmates of our wards; for many women among even the upper classes of society were carried off under its fatal influence. During the months of December and January, no less than twelve of such deaths, in and about Dublin, came to my

own knowledge; and I have heard of four or five more occurring in the beginning of last month.

"On the outset of the fever in the hospital it displayed uncommon virulence, and the first seven patients who were attacked fell victims to its deadly malignity.

"It may not, perhaps, be uninteresting to mention the number attacked on different successive days, as marking, to a certain extent, the progress of the epidemic. Thus, on each of the following days, viz: the 1st, 3d, 4th, 6th, 9th, 10th, 11th, and 12th of December, there was *one* woman seized with the disorder; *three* on the 13th; and *three* on the 15th: on no subsequent day of this month was there more than one; and on many days not one was attacked; but in February *two* were attacked on the 8th; *two* on the 9th; and *two* on the 10th.

"With respect to the period after delivery at which the patient was seized, the following are the general results: 2 were attacked in three hours from the completion of labour; 1 in four hours; 1 in twelve; 1 in fourteen; 1 in seventeen; and 1 in twenty-two hours. Each of these seven cases terminated fatally.

"One was seized in twenty-two hours after delivery, and 1 in twenty-three; the former recovered, and the latter died. Thus, we see, of 9 patients, in whom the complaint manifested itself on the first day of childbed, 8 died; 12 were affected on the second day, 6 of whom died; 10 were attacked on the third day, and of this number the disease proved fatal to 3.

"One woman, who was slowly recovering from an attack of scarlatina, which came on soon after delivery, was seized with symptoms of peritonitis on the tenth day, under which she rapidly sank. There are yet five cases to be accounted for, but in these we could not fix the precise day on which the disease attacked them, so stealthy and imperceptible were its incipient advances.

"This low, insidious manner in which the disorder not unfrequently crept into the system (if I may so say), taking hold upon the vitals without giving any unequivocal evidence of its presence, constitutes, I think, a remarkable feature of the epidemic, and places it in strong contrast with the epidemics described by Gordon, Hey, Armstrong, Joseph Clarke, Collins, and others.

"From Dr. Collins's report of the hospital, it would appear that between one-third and one-fourth of all the patients admitted were primiparæ, and this exactly corresponds with Dr. Hardy's and my report. But amongst the patients attacked with puerperal fever, in the late epidemic, a much larger proportion than the above were confined of first children; in fact, 19, or one-half of the 38, had been pregnant for the first time. Curious to say, Dr. Collins's experience on this point is exactly the same as my own; for, of his 88 cases of puerperal fever, 44, the one-half, we perceive, were women in their first labours.

"Although I have not made it a matter of special statistical investigation, still I think I am correct in saying that those women who were in bad health, or suffering any chronic complaint at the time of admission, as well as those who had tedious or difficult labours, were more liable than others to become the subjects of puerperal fever.

"Dr. Joseph Clarke's experience upon this point agrees with mine. He observes: 'Most of our patients attacked in the year 1787 were admitted in a weakly state, or had tedious and fatiguing labours.'

"With reference to the important and much debated question of the contagiousness of puerperal fever, my late experience does not enable me to say anything decisive. Two facts, however, I may be permitted to mention as being, in some degree, relevant to this point. On four different occasions it happened that the two patients in adjoining beds were seized with the disorder. I do not attach any weight to this circumstance myself, but think it right to mention it.

"The other fact easily admits of being construed into a proof of the contagious nature of the disease.

"In two opposite wards (Nos. 7 and 8), on the same corridor, there were nine fatal cases, nearly one-half of the entire number of fatalities, and more than occurred in any other three wards. Now, the only way in which I can

account for this is, that a mother and daughter are respectively the nurses of these two wards, and having, on this account, more intercommunication, would be very likely to convey infection from one ward to the other.

"The duration of the disease in individual cases varied a good deal. One patient died in fifty hours from the period of invasion; 1 in sixty hours; and 2 in seventy-two hours. These were our most rapid cases. Four or five days was the average length of time that patients lived after being seized with a fatal attack of the fever.

"The influence of the seasons has been sometimes alluded to as a cause of childbed fever. In the *Mémoires sur les Hôpitaux de Paris*, M. Tenon has given a series of tables exhibiting the number of births, and the mortality of lying-in women and children at the Hôtel-Dieu, in the several months of each year of the decade from 1776 to 1786 inclusive. These statistics show December to be the most fatal month, and June, July, August, September, and October the least so.

"Of the mode of treatment pursued with the different patients who were attacked with the disease, I cannot here give a detailed account; but a brief outline of the general principles on which it was conducted, and of the comparative utility of the principal remedies employed, may prove not unacceptable to the Society.

"I believe it may with truth be affirmed that bleeding, in this epidemic, was inadmissible. The only cases in which it was tried proved it so, and both of them died, the disease seeming to be wholly unaffected, if not aggravated, by the measure. My opinion on this point is not in the least shaken by the dictum of Gordon, 'That puerperal fever is inflammatory at the commencement, and putrid only in its progress;' backed though it be by the experience of Hey, Armstrong, and Professor Meigs, the latest and most voluminous author on puerperal fever. Gordon himself states that, unless he could abstract twenty-four ounces of blood at the first depletion, he despaired of the patient's recovery; and this very statement explains the secret of his success. His cases were nearly all examples of the sthenic, synochal, sporadic form of the disease, which, as we all know, is by far the most manageable form. But the cases which would not bear bleeding, and which, in other words, approached to the low typhoid puerperal fever that is chiefly met with in hospitals, he found to be the most intractable and the most fatal. We find Dr. Meigs, too, saying, 'Very few persons can be expected to survive these childbed fever inflammations, whether accidental or unavoidable, when the circumstances forbid a resort to bloodletting.' In support of the supposition above thrown out, I would beg to draw attention to the significant fact that each of these four authors, Gordon, Hey, Armstrong, and Meigs, the great champions for the lancet in the treatment of puerperal fever, derived their experience of the disease from *private practice*; and it is now well established that a strict parallel as to the mode and results of treatment can be rarely instituted between the disease as it presents itself in hospital and in general practice.

"To return, however: although general bleeding was found so wholly useless, yet local depletion deserves to be mentioned in more qualified, if not more encouraging terms.

"Most of our cases that recovered were leeches over the hypogastrium at the very beginning of the attack, and, so far as I am capable of judging, with decided benefit. No doubt the same means was likewise used with some that died; nevertheless, this does not alter my opinion.

"Epithems of spirits of turpentine, hot-water fomentations, and linseed-meal poultices, and hot salt, were external applications in constant use; and, though not in themselves of a powerful nature, were, nevertheless, found to be indispensable auxiliaries in the treatment.

"*Mercury* was tried in a large proportion of cases, and in various doses, but I cannot say I ever observed any decided improvement to have been traceable to its specific action on the system. In some instances, the disease progressed with such frightful rapidity that absolutely there was not time for the drug to make an impression upon the constitution. In other cases the mercury seemed to have produced diarrhoea, and had, therefore, to be laid aside. In two cases

death occurred, notwithstanding that ptyalism had been excited. As a purgative, it was in constant requisition, but always combined with, or followed by, other cathartics, and in this way it was found, as it always is, an efficient and useful agent. Many of our cases that recovered got repeated doses of calomel or blue pill, but in one instance only were the gums touched, so that, if it cured the disease, it did so without affecting the system. When exhibited with this intention, it was always combined with opium, and occasionally with camphor also.

"*Rectified oil of turpentine* is another remedy that was largely employed, but in only two, or at most in three cases, did it seem to have been decidedly productive of benefit; and in all these cases wine, and in two of them camphor, was given at the same time. Combined with an equal quantity (three or four drachms) of castor oil, the turpentine proved to be a most valuable anti-flatulent purgative. On other occasions it was exhibited in one or two drachm doses every hour or second hour. It never sickened the stomach, and patients made no complaint of taking it.

"In one case I tried the *opium* treatment, giving a grain every hour till unequivocal indications of narcotism came on (which happened after six grains of the drug had been taken), but without any amelioration of the symptoms. This woman had been bled before the opium treatment commenced.

"If we might judge from this solitary instance, the disease in question does not seem to engender any very apparent tolerance to this medicine.

"*Wine* was allowed to all our cases; and in some from a very early period of the disorder. All the patients who recovered from a bad attack of the complaint got wine to the extent of eight, ten, or twelve fluidounces in the twenty-four hours; and this from the second or third day of their illness. Some of them, too, got brandy along with the wine. In forming an estimate of the utility of this stimulant, I would wish to express myself with the strictest caution and reserve; but I can with truth say, that on no occasion did I see reason to regret its exhibition; whilst in some cases its good effects did not admit of doubt. If I had to encounter another outbreak of puerperal fever, similar to that just subsided, I should, with my present knowledge, give wine much more freely to my patients.

"After a calm and deliberate survey of the symptoms, treatment, and other attendant circumstances of the late epidemic—viewed in relation to this all-important question of treatment—the practical conclusion at which I arrive is embodied in this short precept: To leech promptly—to purge actively—and to stimulate freely. Such, at least, are the leading principles that would guide me, and the treatment of all our successful cases was based upon them. In making this statement, I am fully aware of the facts that the same line of treatment may not be adapted to different epidemics, or even to the same epidemic as treated in hospital and in private practice.

"The proportion of fatal cases in this epidemic is, I believe, somewhat below the average mortality in puerperal fever when occurring in hospital patients, 21 having died out of 38, which is exactly at the rate of 55 deaths per cent.¹ If this result is in any degree attributable (and I am far from asserting that it is so) to the treatment employed, I would feel inclined to ascribe it to the fact of stimulants having been systematically used from an earlier period of each individual case, and given with more freedom than has been heretofore recommended by any author that I know of, excepting, perhaps, Dr. Copeland; and even he did not go beyond camphor and turpentine.

"It is but justice to remark here that, in adopting this, comparatively speaking, stimulant line of treatment, I only carried into effect a suggestion that had been previously thrown out by Dr. H. Kennedy, and which was embodied in a

¹ Thus, Dr. Joseph Clarke lost 21 out of 28 patients seized with puerperal fever in this hospital; Dr. Collins lost 56 out of 88; and Dr. Johnson 10 out of 14; William Hunter, in his hospital practice, had 31 deaths out of 32 cases; and Dr. Leake, in the Westminster Lying-in Hospital, lost 13 out of 19 patients affected with this fever. Thus, to sum up, in 181 cases there were 131 deaths, which is at the rate of nearly 72½ per cent.

paper he read before this Society some years ago, wherein he traced a resemblance between puerperal fever and typhus, and referred them both to the same group or family of diseases."—*Dublin Quarterly Journal of Medical Science*, May, 1855.

68. *Resorption of the Placenta.* Dr. SABATIER, of Bédarieux (France), has published in *L'Union Médicale* of the 24th of April, 1855, three very interesting cases, which would tend to show that portions of retained placenta may be absorbed, and be rejected from the economy, partly by way of the bronchi. The author thinks that the veins take up the products of decomposition, which, entering the torrent of the circulation, are eliminated in the shape of the various excretions—such as the perspiration, saliva, tears, &c.; and he holds that the very fetid expectoration, which was noticed in his three patients, shows that the putrid substances are also taken up by the lymphatics. M. Sabatier does not, however, dogmatize on the subject, but calls attention to the facts, and these certainly point very clearly to an abundant casting off of sphacelated matter from the lungs, without any of the signs which would accompany gangrenous inflammation of these organs. We would beg our readers to refer to a case of this kind brought before the Medical Society of London, by Dr. Winn.

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

69. *Prolonged Retention of Life by Infants who have not Breathed.*—The long period during which life may, under certain circumstances, be retained by the infant who has never breathed, is a fact full of interest to the physiologist, the medical jurist, and the accoucheur. The experiments of Legallois show that, in the mammalia, the fœtus which has not breathed can resist death from submersion much longer than the fœtus in which respiration has been carried on. Puppies and kittens, immediately after birth, may be kept under water for twenty-eight minutes with impunity; when five days old, they perish after sixteen minutes' submersion; and, when fifteen days old, they die as rapidly as other warm-blooded animals of any age, from deprivation of air. The human stillborn fœtus can probably live longer without respiration than any other mammalian fœtus. The following cases are collected in the *Gazette Hebdomadaire* for December 1, 1854, from different sources. They are very striking, and very suggestive to the practical accoucheur.

Case 1.—A woman, aged 25, who had tried to conceal her pregnancy, was delivered when seated on a tub. The infant, born without any signs of life, was buried in a sand-pit, and, after remaining there for half an hour, was removed, and lived. This case is described by Dr. WEESE in 1845, in *Badisch. Ann. f. Staatsarz.* x, 2.

Case 2.—In 1850, a young woman was tried by the tribunals of Berlin, who had buried her new-born male infant, believing it to be dead. After an hour, the infant was disinterred, and recalled to life.

Case 3.—T. P., a servant, aged 23, was delivered in a stable, when leaning against the wall, alone, and in a state of unconsciousness, about half past 4 A. M., on the 16th of October. When she came to herself, she found the in-

¹ Since writing the above, Dr. Sinclair has informed me that the mode of treatment pursued here in puerperal fever by my predecessor, Dr. Shekleton, differed in only one point from that above described: Dr. Shekleton did not purge as actively as I did. The results of his experience in the disease I do not know; but I am happy to be able to state that a clinical report is in course of preparation, which will furnish us with full particulars not alone on this point, but of the practice and statistics of the hospital during the entire period of Dr. Shekleton's mastership. Such a work must prove of immense value. And I have no doubt but that the two gentlemen, Dr. E. B. Sinclair and Dr. George Johnston, to whose hands its preparation has been intrusted, will fulfil this duty in an able and efficient manner.